# ABSTRACT

A high speed scalable multiplier. The high speed scalable multiplier can include a folding multiplier configured to fold multiplicands and multipliers where individual ones of the multiplicands and multipliers exceed a folding threshold. The folding multiplier also can compute a product of the multiplicands and multipliers based on less than all bits forming the multiplicands and multipliers. The high speed scalable multiplier also can include a conventional multiplier and at least one additional folding multiplier, each of the multipliers being individually, selectably activatable.